Work Ord	er ID	107991
October-07-13		AM
Item ID:	D3264-	1
Revision ID:		

\*407001\*

Page 1

October-07-13	0:05:58 AM			an de la companya de	1 ( ) / A. i	/ MM I	* * **						
tem ID: Revision ID:	D3264-1		- ·· - ··		Accept	*N900	1040	100	)* s	etup Star	* *N	S1*	
	Bracket									Stop	*N	S2*	
Start Date:	10/07/13	Start Qty: 4	.00	*4*		Cust Item	ID:						
Required Date:		Req'd Qty: 4		- * <b>1</b> *		Customer							
Reference:				-		•				<b>~</b> .			
Approvals:	Process Pl	an: MUT	Date:	13-10-0	Y Tooling:		Date:		R	un Stai	171	R1*	
					•		Date:			Sto	*N	R2*	
Sequence ID/ Work Center II	) )	Operation Description			Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	_
Draw Nbr	Re	vision Nbr											
D3264	Re	v A											
100					0.00	MH	1	13/10	109				
*100* Bandsaw		Men	no		0.00	1111	·	, , ,	109	<b>d</b>			
Jeaspa Bandsaw		CUT	BLANK 5.700"	LONG					,	Ψ			
110					0.00								
*110*					0.00	JFC 20	013-10-15	5	4	ψ			
HAAS I		Mer			0.00					,			
HAAS CNC vertica	1 machine #1		CHINE AS PER I										

DEBURR AS PER DWG

DOA: Date: **WORK ORDER NON-CONFORMANCE / UPDATE** Yes / No NCR. OA Closed: Date: DISPOSITION **AGAINST DEPARTMENT/PROCESS** Work Order: Skid-tube Water Jet Engineering Rework Crosstube Machining Prod. Eng. Coor. Part No. Small Fab Quality Scrap Thermoforming Rec/Store/Packaging Other Finishing Use-as-is Work Order Update Large Fab Composite Supplier NCR No. Description of work order update Sign & Initial Action Root Verification Chief Eng Date Qtv or Non-conformance Description Date QC Inspector Cause Step Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved **FAULT CATEGORY Landing Gear** General Bending Bend Grain Ovalized Pressure/Forced Centre Not Concentric to O/S BOM/Route Hardware Over/Under tolerance Temperature/Cure Cracks Broken/Damaged Inspection Incomplete Part Incorrect Weld Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled **Positioned Wrong** Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Other Ripples in Bend **Drill Holes** Offset

Out of Calibration

Out of Sequence

**Outside Dimensions** 

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-07-13 9:05:58 AM

Item ID: Revision ID:	D3264-1			Accept	*N900	<u>040100</u>	)* S	etup Star	1471
Item Name:	Bracket							Stop	*NS2*
Start Date:	10/07/13 .	Start Qty: 4.00	*4*		Cust Item II	<b>D</b> :			
Required Date:	10/07/13	Req'd Qty: 4.00	*4*		<b>Customer:</b>				
Reference:			_						
Approvals:	Process Pl	an: ,	Date:	Tooling:	Da	te:	R	un Star	"INK1"
	QC:		Date:	SPC (Y/N):	Da	te:		Stop	*NR2*
Sequence ID/ Work Center II	)	Operation Description		Set Up/ Run Hours	Tool ID	Tool # Plan Code	Accept Qty	Reject Qty	Reject Insp. Number Stamp
120		QC2- Inspect parts off mac	hine FAI/FAIB	0.00					
*120*		Memo		0.00	JFC 2013	10-15	4	$\phi$	
Quality Control		Memo							
130		QC8- Inspect parts - secon	d check	0.00	,				
*130*					St 12-10-10	· ·	4	Ø	
QC Quality Control		Memo		0.00	784 15-10 ·· 1	<i>D</i>			
140		Chemical Conversion Coa	per QSI005 4.1	0.00				20	
*140* HandFinish		Memo		0.00			<i>i</i> -/	HO	13-10-16
Hand Finishing									

												DQA:	Da	te:	
NCR:	Yes	/ No				<b>WORK ORDER NON-C</b>	100	<b>NFORM</b>	MANCE / UP	DATE		•			
												QA Closed:	Da	te:	
Work Ord	er:					DISPOSITION				AGAINST D	Ef	PARTMENT	PROCESS		·
, work ora						Rework	1		Skid-tube	Crosstube	٦		Water Jet		Engineering
Part I	۷o.					Scrap	Machining Small Fab			7	Prod. Eng. Coor.			Quality	
				Use-as-is	ŀ		noforming	Finishing		Rec/Stor	e/Packaging	-	Other		
NCR I	Vo.					Work Order Update	]		Large Fab	Composite	╛		Supplier		
Root					Descri	ption of work order update		Initial Action			T	Sign &			
Cause		Date	Step	Qty	(	or Non-conformance			Desc	ription		Date	Verification	n	QC Inspector
Doc/Data															
Equip/Tooling	L														
Operator															·
Material															
Setup					!	<u> </u>							4		
Other															
Process													•		
Supplier															
Training								,				,			
Unapproved															
		-				F	AUL	T CATE	GORY						
Landi	ng (	Gear				General		_							_
İ		Bending				Bend		Grain				Ovalized			Pressure/Forced
		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re			Over/Under	tolerance		Temperature/Cure
		Cracks			, [	Broken/Damaged		Inspecti	on Incomplete	. [		Part Incorre	ct		Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/	Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
	Cuffs Contamination							Part Moved		_					
	Heat Treat Countersink				Mislabeled			Positioned Wrong							
		Inspectio	n Strip in	<b>—</b>				Misread			Power Loss/Surge			Other	

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

Work Orde		7991		*1079	991*							Page 3	}
Item ID: Revision ID: Item Name:	D3264-1 Bracket			Accept	*N9000	740	100	)*	Setup	Start Stop		S1*	
Start Date: Required Date: Reference:	10/07/13 10/07/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item II Customer:	<b>)</b> :							
Approvals:	Process Pla	n:	Date:	~~~ ~~~~	Date the Date of Date	te:			Run	Start Stop	*N  *N	R1* R2*	
Sequence ID/ Work Center II  150  *150* Powdercoat  Powder Coating	<b>D</b>	Operation Description White Gloss(Ref:4.3.5.1	) per QS1005 4.3-Alum	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accep Qty	Qt	y I	Reject Number <i>13-10-1</i>	Insp. Stamp	D 3
*160 *160* QC Quality Control		QC3- Inspect Part Finish  Memo		0.00 DAS 27 9-89	1			4					-
170 *170* Packaging		Identify as per dwg & St	ock Location: 5798	0.00				13//	1/17		y)	Das 32 9-89	

Packaging

				DQA:	Date: _		
NCR: Yes / No	WORK ORDER NON-CO	NFORMANCE / UPI		losed:	Date:		
Work Order:	DISPOSITION		AGAINST DEPART				•
work Order.	Rework	Skid-tube	Crosstube	Wat	ter Jet	Engineering	
Part No	Scrap	Machining	Small Fab	Prod. Eng.	Coor.	Quality	
	Use-as-is	Thermoforming	Finishing Re	c/Store/Pack	kaging	Other	
NCR No.	Work Order Update	Large Fab	Composite	Su	pplier		

Initial

Chief Eng

Action

Description

Sign &

Date

Verification

QC Inspector

Description of work order update

or Non-conformance

Qty

Step

Date

Material										
Setup										
Other										
Process										
Supplier			·							
Training										
Unapproved										
		F	AULT CATEGORY							
Landi	Landing Gear General									
	Bending	Bend	Grain	Ovalized Pressure/Forced						
	Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance Temperature/Cure						
	Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect Weld						
	Crushed/Crimped.	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing Wrong Stock Pulled						
	Cuffs	Contamination	Maintenance	Part Moved						
	Heat Treat	Countersink	Mislabeled	Positioned Wrong						
	Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge Other						
	Ripples in Bend	Drill Holes	Offset							
	Torque Waves in Extrusion	Drawing	Out of Calibration							
	Turning Sequence	Finish	Out of Sequence							
	Wave/Twist in Tube	Folio	Outside Dimensions							

Root

Cause
Doc/Data
Equip/Tooling
Operator

Work Orde				*107			Page 4		
Item ID: Revision ID: Item Name:	D3264-1 Bracket			Accept	*N90004	\1\\n'	<b>★</b> Setup	Start Stop	*NS1* *NS2*
Start Date: Required Date: Reference:	10/07/13 10/07/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item ID: Customer:		_	<b>C.</b>	
Approvals:	Process Pl QC:	an:	Date:	Tooling: SPC (Y/N):	Date:		Run	Start Stop	*NR1* *NR2*
Sequence ID/ Work Center I	D	Operation Description QC21- Final Inspection	Work Order Release	Set Up/ Run Hours	Tool ID Tool		Accept Rej Qty Qty		Reject Insp. Number Stamp

0.00

Memo

\*120\*

Quality Control

pl/3-10-18

DQA:	Date:	

NCR: Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

	,									QA Closed:	Date	e:
Work Orde	r·				DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
	Part No. Rework  Scrap					Skid-tube Machining	Crosstube		Water Jet d. Eng. Coor.	Engineering Quality		
NCR N	0				Use-as-is Work Order Update	]	Thermoforming Finishing Large Fab Composite			Rec/Stor	e/Packaging Supplier	Other
Root				Descri	ption of work order update	tion of work order update Initial			ction Sign &			
Cause	Date	Step	Qty		or Non-conformance	Chi	ef Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material												
Setup		į.									-	
Other												
Process												
Supplier												
Training	_			·								
Jnapproved		<u> </u>										
<del></del>						AUL.	T CATE	GORY				
Landin	ig Gear			_	General				<b></b>	1	Г	<b>-</b> .
-	Bending				Bend	-	Grain			Ovalized		Pressure/Forced
-	Centre No	ot Concei	ntric to (	o/s	BOM/Route	$\boldsymbol{\vdash}$	Hardwa			Over/Under		Temperature/Cure
-	Cracks			<u> </u>	Broken/Damaged		-	ion Incomplete		Part Incorre	<b>-</b>	Weld
-	Crushed/	Crimped.		<u> </u>	Burrs	_		tions Incomplete,	/Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
}	Cuffs			-	Contamination	$\vdash$		enance	_	Part Moved		
}	Heat Trea			<u> </u>	Countersink	-	Mislabe		<u> </u>	Positioned V		$\neg$
	Inspectio	•	Tube		Cut Too Short	-	Misrea	d	<u> </u>	Power Loss/	Surge	Other
	Ripples in			<u> </u>	Drill Holes	$\vdash$	Offset					
	<b></b>	Torque Waves in Extrusion Drawing		Out of Calibration								
	Turning Sequence Finish		-		Sequence							
	Wave/Twist in Tube Folio				Outside	Dimensions						

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-07-13 9:05:57 AM

Work Order ID:

107991

Parent Item:

D3264-1

Parent Item Name:

Bracket

Start Date: 10/07/13

Required Date: 10/07/13

Start Qty: 4.00

Required Qty: 4.00

Comments

IPP A04.09.02New issueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.250X04.500		Purchased	No			· · · · · · · · · · · · · · · · · · ·	f	17.4934		2			
6061-T6 Bar 1.25 X 4.50									design for the second		. *		
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT004		17.4934							
				112	:628	1.4834					11		
				121	290	1 77				OV	N/ /		

14.24

- M126160

13/10/08

QA:	Date:	

NCR: Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

	•								QA Closed:	Dat	e:	
Work Order:					DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No.			Rework Scrap Use-as-is	Ther	Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing		Prod. Eng. Coor.		Engineering Quality Other			
NCR N	0			· · · · ·	Work Order Update	J	Large Fab	Composite		Supplier		
Root				Descri	ption of work order update	Initial	Ad	ction	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Desc	cription	Date	Verification	QC Inspector	
Ooc/Data Equip/Tooling Operator Waterial Setup Other Process Supplier Fraining												
Jnapproved		l	.l	<u>.</u>	F	AULT CATI	 EGORY		1	l .	1	
Landin	g Gear				General							
-	Bending Centre No Cracks Crushed/ Cuffs Heat Trea	Crimped		o/s	Bend BOM/Route Broken/Damaged Burrs Contamination Countersink	Instruc	tion Incomplete ctions Incomplete, enance	/Unclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned N	ct issing	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled	
ļ-	Inspection Strip in Tube Ripples in Bend				Cut Too Short	Misrea	Misread Offset		<u> </u>		Other	
ļ-					Drill Holes	<b>—</b>			<b>.</b>	· (		
Ī	Torque W		Extrusio	n	Drawing	Out of	Calibration					
ľ	Turning S				Finish	Out of	Sequence				•	
	Wave/Tw	ist in Tul	be		Folio	Outsic	le Dimensions					

DART AEROSPACE LTD	Work Order:	10799/
Description: Bracket	Part Number:	D3264-1
Inspection Dwg: D3264 Rev: A		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.687	+/-0.010	0.690	✓		Laliper	JFC-01
0.063	+/-0.010	0.060	<b>✓</b>		ı,'	11
0.125	+/-0.010	0.119	<b>~</b>		MIC	SFC-02
0.875	+0.010/-0.020	0.8685	$\vee$		11	11
0.062	+/-0.010	0.065	<b>/</b>		u	116-120
R0.03	+/-0.030	0.030	<b>V</b>		Radb	JFC 1132
R0.13	+/-0.030	0.125	J		Radb	JFE 118
1.00	+/-0.030	0.999	V		Caliper	OFCOI
0.125	+/-0.010	0.126	V		(i	11 .
				†		
0.600	+/-0.010	0.594	<b>\</b>		Caliper	JFC-01
4.000	+/-0.005	3.998	<b>/</b>		('1	11
0.750	+/-0.010	0.750	$\vee$		11	Ų
Ø0.194	+0.005/-0.000	0.194	✓ ·		(1	(1
5.50	+/-0.030	5.501	<b>~</b>		Caliper	JHE-01
0.125	+/-0.010	0.126	~			L <sub>L</sub>
0.063	+/-0.010	0.064	<b>/</b>		Mic	116-120
R0.25	+/-0.030	RO.750	<b>✓</b>		Rud G	JE 14
4.27	+/-0.030	4.268	<b>/</b>		Caliper	JFL-01
R0.30	+/-0.030	0.297	$\vee$		Rad G	JFL 19/64

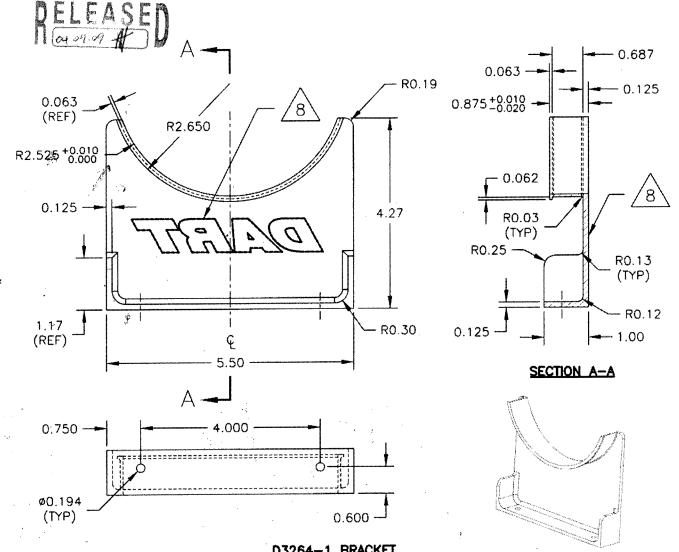
Measured by: JFC
Date: 203-10-15
Audited by: A
Date: /3-/0-/6
Prototype Approval: N/A
Date: N/A

Rev	Date	Change		Revised by	Approved
A	04.09.03	New Issue		KJ/JLM	
B		Ø0.194 was Ø0.208; dimensions removed	•	KJ/JLM ,,	
C		<u> </u>		KJ/EC/DD	138
С	07.10.10	Tolerance for 0.875 revised		KJ/EC/DD	1.





DESIG	<u> </u>	DRAWN BY		T AEROSPACE WKESBURY, ONTARIO, CANAD		
CHECH	(ED "	APPROVED	DRAWING NO.		RE	EV. A
	all .		D3264		SHEET 1	OF 1
DATE	<u></u>	<u></u>	TITLE		s	CALE
04.0	4.20		BRACKET			1:2
Α		04.04.20	NEW ISSUE			



## D3264-1 BRACKET

D3264-1:

2

φĚ

- 1) MATERIAL: 6061-T6/T651 (QQ-A-200/8 OR QQ-A-225/8) (REF. DART SPEC. M6061T6B)
  2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
  3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

  6) PART IS SYMMETRIC ABOUT CENTERLINE

  7) IDENTIFY WITH DART P/N & B/N USING FINE POINT PERMANENT MARKER

  8) ENGRAVE DART LOGO AS SHOWN USING 0.75 HIGH × 0.010 DEEP (MAX) LETTERS WITH (MIN) TOOL RADIUS OF 0.25 (MIN) TOOL RADIUS OF 0.25

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